

MOSQUITO NOTES—No. 4.

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Among the mosquitoes lately sent from the various Army Stations are the following, of interest mostly because of their apparent close relation to already known forms :

Uranotenia cæruleocephala, Theob., var. *lateralis*, n. var.—♀. Head covered with flat blue scales, becoming white around the eyes, a couple of brown bristles between, and a few around, the eyes, no fork scales; the scales on the occiput change from a dark indigo or violet to a light blue, according to the direction of the light, and when viewed from the side may even seem brown with a wide white border around the eyes, but in other positions are some shade of blue; antennæ brown, verticels and pubescence brown, basal joint light testaceous, with a few thin flat scales; palpi also light brown, very short, hardly longer than the depth of the clypeus, the last joint reduced to a knob; proboscis dark brown, swollen at the tip; clypeus testaceous; eyes brown and silver.

Thorax brown, prothoracic lobes covered with flat scales, which change from white to bright blue; mesothorax covered with long slender brown scales, slightly if at all curved, suggesting lateral wing scales in their general appearance, a median row of long brown bristles, and clusters of them near the wing joint and scutellum, a small bunch of flat changeable (bright blue to white) scales just cephalad of the wing joint; scutellum brown, covered with brown flat scales, with green iridescence, and a few border bristles; pleura brown, with one large bunch of flat changeable (bright blue to white) scales on the mesopleura; metanotum brown.

Abdomen brown, heavily covered with brown flat scales, with green iridescence, unbanded, but with well marked lateral, apical white spots on each segment; venter almost entirely light scaled.

Legs: coxæ and trochanters light, and white scaled, femora all light ventrally, but brown dorsally, the tibiæ much darker, and the remainder of the legs brown; unguis very small, simple and equal.

Wings brown, covered with brown scales, the median broad, rather short, and often truncate, the lateral broadly lanceolate, and much longer than the median; 1st submarginal cell much ($\frac{1}{4}$) shorter and somewhat narrower than the 2nd posterior, the stem nearly three times as long as the cell, and a third longer than that of the 2nd posterior; posterior cross-

vein is about the same length as the mid cross-vein, and distant about its own length ; halteres white, a few dark scales on the knob.

Length 2.5 mm. Taken June 25, 1905. Habitat, Cottabatto, Mindanao, P. I.

Described from four females sent by Lieut. E. B. Vedder, Asst. Surgeon, U. S. A. The distinctive variation lies in the well-marked lateral spots, and if it should happen that Theobald described from rubbed specimens, that variation may disappear.

Culex Portoricensis, n. sp.—♀. Head dark, with a narrow median line of ochraceous curved scales, light forked scales upon the occiput, and reaching well up toward the vertex; the median curved scales followed by light flat scales and a narrow stripe of dark flat scales on the side; antennæ dark brown, verticels and pubescence brown, basal joint brown, with a few flat lighter brown scales; palpi dark brown, a few white scales at the tips; proboscis very long, dark brown, with a minute white band, at times merely a trace, near the middle; clypeus dark brown; eyes brown and garnet.

Thorax dark brown; prothoracic lobes with light spindle-shaped scales; mesonotum sparsely covered with small, slender curved golden brown scales on the sides, the median portion partly denuded, but some dark brown spindle-shaped scales remaining; scutellum dark, with light, slender curved scales; pleura dark brown, with numerous small patches of flat, white scales; metanotum dark brown.

Abdomen dark, covered with dark brown scales; very narrow basal white bands, and small basal white lateral spots; venter mostly white scaled.

Legs: coxæ and trochanters dark, with light scales; femora dark brown dorsally, almost white ventrally, more markedly so on the hind legs; tibiæ brown, as are all the remaining joints, but on the hind legs the metatarsi, the first, second, third and sometimes the fourth tarsal joints have minute basal white spots, not amounting to bands; on the mid legs the spots appear on the metatarsi, first and second tarsal joints, and on the fore legs there are minute yellowish spots at the tips of the tibiæ, and base and apex of the metatarsi, the remaining joints being brown. Fore and mid unguis uniserrate.

Wings brown, with brown scales ; cells rather short ; the first sub-marginal a little longer and narrower than the 2nd posterior cell, the stem of each about two-thirds as long as the cells, the bases nearly in a line ; the cross veins are all nearly the same length, mid and supernumerary meet, and the posterior cross-vein is distant about its own length from the mid ; halteres have light stem and fuscous knob.

The male greatly resembles the female ; the palpi are long, with golden brown plumes, and four narrow white bands ; fore and mid unguis biserrate.

Length 3.5-4 mm. Taken Aug. 15, 1905. Habitat, San Juan, Porto Rico.

Described from several specimens sent by Dr. L. G. de Queveda, Cont. Surg. U. S. A., which were taken at the Quarantine Station, Yellow Fever Hospital and Quarters ; it at first glance suggests *C. teniorhynchus* minus the hind legs, and probably lies near that, but is evidently distinct.

Finlaya ? nigra, n. sp.—♀. Head black, densely covered with ochraceous, almost white, scales, broad spindle-shaped and forked scales on the occiput, extending up to the vertex, spindle-shaped scales around the eyes, flat scales on the sides, a few light bristles extending forward between the eyes, and dark ones around the eyes ; antennæ very dark brown, almost black, apparently fourteen-jointed, verticils brown, pubescence white, a few scales on the first joint, basal joint testaceous, with fine light erect hairs, and a few small flat scales ; proboscis very dark brown, with violaceous reflections ; palpi very dark brown, not unusually heavily scaled, a few hairs at the tip ; clypeus dark brown, eyes dark brown.

Thorax black ; prothoracic lobes clothed with flat white scales ; mesothorax with dark brown curved scales, except the sides and "shoulders," the former heavily covered with broad spindle-shaped white scales, the latter with white broad-ended flat scales, a line of broad curved white scales around the "bare space," some light bristles projecting forward at the nape, a short line of them near the "bare space," and a heavy bunch over the wing joint ; scutellum partly denuded, but the basal row of scales is *curved*, the remainder flat. The scales on the mid lobe white, those on the lateral lobes a very dark brown, long light bristles, probably six, on the mid lobe ; pleura very dark, with a few large patches of white flat scales ; metanotum dark brown.

Abdomen dark, heavily scaled with dark brown flat scales (with violaceous reflections), and small white, basal, lateral spots, apical hairs

light ; venter mostly white-scaled, but dark apical bands on some of the distal segments. There is some suggestion of tufts on the ventral side, but not well marked, and may be due to the position in which the specimen dried.

Legs : coxæ and trochanters light and sparsely light scaled; ventrally the femora are all light scaled, and in the hind legs are dorsally light scaled about one-half (basal) their length, and are rather heavily bristled. The remainder of the legs is brown, with the exception of a rather brilliant knee spot on the hind legs, a smaller one on the mid legs, and in some lights a light line the length of the fore tibiæ on the caudal side ; unguis rather large and heavy, equal and uniserrate.

Wings clear, brown veined, rather heavily scaled with dark, broad, truncated brown scales, suggesting typical *Teniorhynchus* scales, and having violaceous reflections. Fork cells very long ; 1st submarginal about a fifth longer and somewhat narrower than the 2nd posterior cell, stem not half the length of the cell, and the same length as that of the 2nd posterior ; the supernumerary cross vein a little interior of the mid, and about the same length, the posterior nearly twice as long as the mid cross-vein, and more than double its own length interior ; halteres light. The third vein extension is more marked than often found, but not so decided as in *Desvoidia fusca*, Theob.

Length 5.5 mm. Taken Aug. 3, 1905. Habitat, Rock Island Arsenal, Ill.

Described from one specimen sent by Dr. G. G. Craig, Cont. Surg. U. S. A., in some very interesting collections from Rock Island Arsenal. While the characteristics do not agree fully with Theobald's definition of *Finlaya*, they correspond more closely to those of this than to those of any other existing genus, and I have therefore referred it, provisionally at least, to *Finlaya*. The species is extremely interesting, because it is, so far as I can ascertain, the first having this peculiar grouping of scales to be reported from the United States.

Another instance of small variation occurs in the *Culex confirmatus*, Arribalzaga, sent me by Lieut. R. Boyd Miller, Asst. Surg. U. S. A., from Fort Screven, Tybee Island, Ga., which agrees perfectly with the description given by Theobald (Monograph, Vol. II, pg. 42), except that the femora are white nearly to the apex *dorsally* as well as ventrally, and *all* the unguis are uniserrate ; the latter is, of course, the important variation.

(To be continued.)